



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/757,265 | 01/14/2004 | B. Ryland Wiggs | N1076 | 4898 |

7590

04/25/2005

Wadley & Patterson, P.C.
Bank of America Plaza
Suite 2020
414 Union Street
Nashville, TN 37219

EXAMINER

ALI, MOHAMMAD M

ART UNIT

PAPER NUMBER

3744

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/757,265

Applicant(s)

WIGGS, B. RYLAND

Examiner

Mohammad Ali

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-62 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1 and 32, drawn to a geothermal heat exchange system, classified in class 62, subclass 260.
- II. Claims 2-8, 22-25, 33-39 and 53-56, drawn to a heating and cooling in heat exchange system, classified in class 165, subclass 45.
- III. Claims 9-11 and 40-42 drawn to rope operation with heat exchange system, classified in class 37, subclass 394.
- IV. Claim 12-14 and 43-45, drawn to a compressor capacity of a heat exchange system, classified in class 62, subclass 228.1.
- V. Claims 15, 17, 46 and 48, drawn to metering device of a heat exchange system, classified in class 62, subclass 511.
- VI. Claims 16 and 47, drawn to expansion valve of a heat exchange system, classified in class 62, subclass 225.
- VII. Claims 18 and 49, drawn to charging of the refrigerator system in special atmosphere of a heat exchange system classified in class 62, subclass 78.
- VIII. Claims 19 and 50, drawn to receiver of a heat exchange system, classified in class 62, subclass 509.

- IX. Claims 20-21 and 51-52, drawn protective surface of a heat exchange tube, classified in class 165, subclass 133.
- X. Claims 26-27 and 57, drawn to insulation of a heat exchange system, classified in class 165, subclass 135.
- XI. Claims 28-29 and 59-60, drawn to cut-off timing switch of a heat exchange system, classified in class 417, subclass 321.
- XII. Claims 30-31 and 61-62, drawn to an oil separator of a heat exchange system, classified in class 62, subclass 470.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions I deals with geothermal heat exchange system and operation of the refrigeration whereas invention II deals with designing of heat exchange system. Invention III deals with transporting material with the use of rope and differs from Invention I and II. Invention IV deals with compressor capacity design and differs from inventions I-III. Invention V deals with a single piston metering device and differs from the invention I-IV. Invention VI deals with expansion valve and differs from the inventions I-V. Invention VII deals with charging of refrigerant in special atmosphere and differs from the inventions I-VI. Invention VIII deals with a receiver and differs from the inventions of I-VII. Invention IX deals with protective surface of heat exchange tube and differs from the invention of I-VIII. Invention X deals with insulation and differs fro

the inventions of I-IX. Invention XI deals with cut-off timing switch of a compressor and differs from the inventions of I-X. Invention XII deals with an oil separator and differs from the inventions of I-XI.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group any one group is not required for Group any other group, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.


A telephone call was made to Mark J Patterson on 04/18/05 to request an oral election to the above restriction requirement, but did not result in an election being made.

.Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is 703-308-5032. The examiner can normally be reached on Monday to Friday.

Art Unit: 3744

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Esquivel Denise can be reached on 703-308-2597. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mohammad M. Ali
April 19, 2004